"Pay-As-You-Throw" Technical Assistance Project Final Report: Background and Introduction

Background

The Indiana "Pay-As-You-Throw" (PAYT) Technical Assistance Project was developed to provide technical assistance in planning and implementing variable-rate user fee programs for local municipal solid waste programs. The project was funded cooperatively by the US Environmental Protection Agency – Region 5 and the Indiana Department of Environmental Management – Office of Pollution Prevention and Technical Assistance (IDEM-OPPTA).

IDEM-OPPTA and US EPA have worked together to promote PAYT financing since the mid-1990s. This partnership led to the US EPA conducting a PAYT Workshop during 1996. In 1997, the IDEM-OPPTA contracted with the Indiana Institute on Recycling (IIR) to convene a series of four PAYT promotional workshops throughout Indiana. These workshops generated much interest in PAYT financing. However, several communities expressed the concern that they lacked the staffing resources or expertise to plan for PAYT implementation. The present project was funded in response to the need for technical assistance at the local level.

In 1999, IDEM-OPPTA contracted with the Association of Indiana Solid Waste Management Districts (AISWMD) to oversee the provision of technical assistance and completion of project tasks. The AISWMD contracted with Jeanann Georgas, of Performance Measurement Group, to provide the technical assistance and complete project tasks.

The PAYT Technical Assistance Project included the following components:

- Community-specific PAYT presentations;
- PAYT Planning and implementation assistance to communities;
- Case study notebook for communities participating in the technical assistance program;
- State-wide database of Indiana communities with PAYT financing for local MSW services;
- Multi-step training workbook for use by communities following project completion; and,
- A Final Report documenting the project activities and the lessons learned.

This document represents the final project activity.

Introduction to this Document

The present document reflects the activities undertaken in the Indiana PAYT Technical Assistance Project. The Final Report is organized into the following sections:

Section 1: Outreach and PAYT Community Presentations;

Section 2: Community Technical Assistance Activities;

Section 3: Indiana PAYT Communities Database and Case Studies:

Section 4: Private MSW Collection Company Presentations;

Section 5: PAYT Workshop Activities;

Section 6: Indiana PAYT Tool-Kit to Assist Future Effort and,

Section 7 Lessons Learned from the Indiana PAYT Project.

While the report summarizes all project activities, the focus of this document is on the "lessons learned" through the project.

"Pay-As-You-Throw" Technical Assistance Project Final Report Section 1: Outreach and PAYT Community Presentations

Background

The Indiana PAYT Technical Assistance Project was intended to meet the local need for technical assistance to facilitate PAYT MSW program planning and implementation. Project activities were directed at assisting communities *already* interested in PAYT financing. Therefore, the consultant did not engage in activities designed to promote PAYT financing. Rather, the consultant recruited communities with an interest in PAYT financing to participate in the AISWMD's PAYT project.

Recruiting Process

The consultant conducted a survey of Indiana regional solid waste management districts to solicit communities interested in the PAYT project. Once identified, the consultant utilized a three-step process to recruit communities to participate in the PAYT Technical Assistance project. These steps were:

- (1) Telephone or written contact with each community referred by the solid waste districts;
- (2) Targeted discussions with prospects to assess community interest in the PAYT project; and
- (3) Presentation to secure formal participation in the PAYT project.

Figure 1, inserted immediately following this page, lists the communities contacted in this process.

Requirements for Participation

In an effort to ensure that communities participating in the AISWMD Technical Project were seriously interested in PAYT financing for residential MSW programs, the Association and consultant required communities to submit an "Expression of Interest" in PAYT financing. The Mayor or Town Council President generally submitted this document in the form of a letter.

Some communities were reluctant to publicly "commit" to PAYT financing prior to offering a specific PAYT program proposal. In response to local sensitivities, the project allowed participation if a community would:

- (1) Agree to seriously consider the economic-feasibility of PAYT financing; and,
- (2) Provide the MSW program and cost information necessary to develop PAYT rate structure alternatives.

Some communities were unwilling to make even these commitments. The project participants agreed that communities reluctant to make these assurances were likely not good candidates for participation in the PAYT project.

"Expression of Interest" as Barrier

While some community elected officials were reluctant to submit the formal "Expression of Interest," there were staff members and MSW program managers from these communities who wanted to receive PAYT planning assistance. The program participants determined that these communities could be served through PAYT planning workshops.

First Wave of Technical Assistance Communities

The PAYT Technical Assistance Program outreach process successfully recruited the following communities to participate in the project:

- Lawrence County Solid Waste Management District (including the communities of City of Bedford, Town of Mitchell, and Town of Oolitic);
- City of Shelbyville;
- City of New Albany;
- City of Elkhart;
- City of South Bend;
- Town of Utica:
- Sullivan County Solid Waste Management District, and
- City of Warsaw.

The PAYT planning activities conducted by each of these communities are described in Section 2.

Proposed PAYT Planning Process

The PAYT Technical Assistance program included a general outline for PAYT planning activities. The planning process involved shared responsibilities between the consultant and the participating communities. The outline for planning activities is shown below:

- Step 1: Consultant and community representatives to meet to discuss PAYT program options, community considerations and community PAYT program preference(s).
- Step 2: Community to provide MSW program features and cost information to consultant. Information to be conveyed using the "AISWMD Local MSW Information Form." (This form is offered as Appendix A. Community to determine PAYT program option preference(s).
- Step 3: Consultant to use MSW program features and cost information to prepare preliminary PAYT rate structure options and revenue stream analysis.
- Step 4: Consultant meets with community representatives to present PAYT rate structure options.
- Step 5: Community to review PAYT rate structure options and select PAYT rate structure type and schedule of PAYT fees.
- Step 6: Consultant to work with the community to prepare a PAYT Program Proposal for presentation to local legislative body (e.g., City Council, Town Council).
- Step 7: Local decision-makers adopt PAYT Program Option.
- Step 8: Consultant works with the community representatives to develop implementation plan including necessary legal documents and public information materials.

The following section details the PAYT planning activities conducted by and for each participating community.

"Pay-As-You-Throw" Technical Assistance Project Final Report Section 2: Community Technical Assistance Activities

Background

This section details the PAYT planning services conducted by each community participating in the PAYT Technical Assistance Program. This section will identify the PAYT planning activities for the steps listed in Section 1.

The discussion of each community will address the following issues:

- Background (current MSW program features, motivation for PAYT, preferences, etc.);
- Activities;
- Barriers; and,
- Outcome(s).

Lawrence County Solid Waste Management District

Background:

In the fall of 1999, the Lawrence County Solid Waste Management District (SWMD) contacted the consultant to discuss establishing a PAYT program. The District was responsible for paying the disposal cost for all trash taken to a county transfer station. The District's motivation for exploring PAYT was that the District could not continue to absorb the disposal cost.

Activities and Barriers:

Step 1:

In October 1999 the consultant made a presentation to the Lawrence County SWMD Board to explain PAYT for MSW service. The consultant advised the Board of the options available to them, as well as the advantages of undertaking a county-wide program to finance disposal costs.

The Board authorized the District to participate in the AISWMD's PAYT Technical Assistance Program. The Board also expressed a preference for a bag or tagged program with a unified rate to be imposed on trash units throughout the county.

The consultant met with the Executive Director following the Board meeting to discuss the informational requirements of the PAYT Technical Assistance Project. The District had already begun tracking MSW by community and would continue to monitor program data.

Step 2:

The consultant and Executive Director spoke several times to ensure that the data were accurate and reflected the full residential MSW stream. One barrier that complicated the collection of the residential MSW data was that the County accepted bulky items at the transfer station and that this waste stream was not weighed or allocated to individual communities.

Step 3:

Over the winter months of 2000, the District submitted a series of MSW reports identifying the residential waste stream, disaggregated by community. In response, the consultant developed a series of proposed PAYT rates to recover disposal costs.

Step 4:

In April 2000, the consultant provided a rate structure proposal. The final version of the proposed rate structure identified a "unit-based" price of \$0.54 for each 30 lb. disposal unit. The price reflected only the disposal costs. Any sticker or bag price, as well as any administrative costs, would result in incremental fees. The PAYT rate structure spreadsheet is offered as Appendix B.

Step 5:

The Executive Director reported that the unit-based PAYT rate program was well received by the Board. However, the District Board was dealing with other issues and no action was taken on the PAYT initiative.

Over the summer of 2000 the District contacted the consultant to renew efforts on the PAYT proposal. The Executive Director indicated that Board members were interested in developing individual community PAYT rate structures to raise revenue to cover more than disposal costs. The District scheduled a PAYT Rate Structure presentation for its September meeting.

At the September 2000 Board Meeting, the consultant discussed the PAYT rate structure presented in April 2000. The Board members reiterated their support for PAYT as an appropriate method for financing the District's disposal costs. The Board members further expressed that they felt PAYT rates could be used to reduce General Fund support for residential MSW programs within each community.

The consultant agreed to proceed with the project, which now meant four individual community PAYT rate structures rather than a single PAYT rate for disposal only. The consultant briefed the Board members, who represented the municipalities of Bedford, Oolitic, and Mitchell, on the additional data requirements to develop community rates. Each community was provided a copy of the AISWMD Local MSW Information Form.

Outcome:

Unfortunately, the consultant was not provided with the community MSW information necessary to develop the four-tier PAYT rate structure desired by the District Board.

In later discussions with the District, the consultant was informed that the Board's priorities had changed and that other issues had supplanted PAYT as a top priority for the District. Despite efforts by the District to restart PAYT efforts, the Board has not continued activities to develop PAYT rates at the County or local level.

City of Shelbyville

Background:

This community of 16,400 residents became interested in PAYT well before the AISWMD PAYT Technical Assistance Project began. Under the leadership of former Mayor Betsy Stephens, a community Task Force began exploring PAYT rates as an alternative financing mechanism. The City of Shelbyville had a municipal trash collection program and a contract program for recycling. The

City was concerned that it needed to explore alternatives to General Fund financing due to increasing costs.

The City Task Force had conducted extensive research into PAYT programs in Indiana. The group had made several site visits and interviewed elected officials and MSW program managers. The consultant believes this group was one of the most informed citizens committees with whom she has worked. This group was deeply committed to PAYT financing leaning toward an arrangement similar to Tell City's "Bag It and Tag It" program.

In the Fall of 1999, the City contacted the Shelby County SWMD about assistance in the PAYT planning process. The District, in turn, contacted the AISWMD and consultant to facilitate Shelbyville's participation in the PAYT Technical Assistance Project.

Following the 1999 municipal election, the outgoing Mayor submitted an Expression of Interest letter indicating the City's desire to participate in the PAYT Technical Assistance Project. The AISWMD and the consultant were informed that the in-coming Mayor, former Clerk-Treasurer Frank Zerr, was "on-board" with the PAYT effort.

Activities and Barriers:

Step 1:

During the winter of 1999-2000, the Shelby County SWMD Director Noell Krughoff and the consultant began discussions relating to developing PAYT rates for the City of Shelbyville. This alliance proved highly valuable as Ms. Krughoff was well-regarded by the City and a strong supporter of PAYT. This alliance also enabled a "Team Approach" to PAYT: the consultant provided information and advice to the District and the District became the local advocate for PAYT.

Ms. Krughoff worked closely with the City's Task Force to provide technical advice on PAYT practices and program options. Her work laid the groundwork for the strong endorsement PAYT received when the consultant made a February 2000 presentation.

Due to the Task Force's research activities, the consultant's presentation concentrated on strategies to develop PAYT for the community. The Street Commissioner took responsibility for providing the MSW program data required for the project. The Task Force expressed preferences for a PAYT program modeled after Tell City's or Crawfordsville's programs. The community had not established a financing preference relating to the type of rate structure.

Barrier: Following the February 2000 presentation the Shelby County SWMD contacted the consultant about some issues that needed to be addressed before implementing PAYT. In identifying residential MSW customers, a review discovered that some properties were included in the City's program even though they did not meet local standards for service. These issues were:

- Some apartment complexes were serviced by the City's MSW program;
- Some businesses were included in the City's MSW program; and,
- A trailer home park was included in the municipal service area even though the lots were not located on city-maintained rights-of-way.

Barrier: The City asked if its MSW Ordinance could be reviewed and updated as part of the PAYT Technical Assistance Project. After discussions with the AISWMD Executive Director, the consultant informed the City that no such review was possible under the scope of services of the project.

In March 2000, the consultant provided Ms. Krughoff with a proposed schedule of PAYT Planning tasks. Ms. Krughoff shared this with the City's Task Force. This form is offered as Appendix C.

Step 2:

In April 2000 the City provided the consultant with a completed local MSW Program Information Form. The consultant and the Shelbyville Street Commissioner discussed the form by phone to address questions. The Street Commissioner stated that one PAYT rate structure option the Task Force was interested in was a one-can limit with program costs financed by those purchasing additional containers.

Barrier: The City encountered a barrier in that its disposal charges were based on cubic yards, not tons. These data had to be converted from cubic yards to tons.

Step 3:

The consultant developed a series of spreadsheets to demonstrate various PAYT rate structures and options. The spreadsheets are provided as Appendix D.

Step 4:

The consultant presented these alternative rate structures at a May 2000 Task Force meeting. The presentation included the "cost of service" rates for the current MSW program, as well as prospective rates for a PAYT program. The consultant reviewed the rate structure components and the resulting revenue stream. The committee seemed most interested in some type of bag or can limit program.

Step 5:

At the June 2000 meeting, the Task Force met to discuss the next step for the PAYT planning activities. An IDEM-OPPTA representative attended this meeting and informed the group that it was necessary to "go public" with the PAYT planning activities.

In July the City asked the consultant for help in developing a PAYT program proposal to be included in Budget Hearing discussions. The consultant prepared a report laying out the decisions that had to be made *prior* to developing a PAYT program proposal. This document was conveyed to the City on July 20, 2000. The consultant spoke with Ms. Krughoff about developing a PAYT program proposal. Ms. Krughoff expressed the opinion that she felt political support for the program was fading.

The consultant contacted Mayor Zerr to discuss the activities necessary to develop a PAYT Program Proposal during the summer budget process. At that time, Mayor Zerr mentioned that the expected increase in the FY 2001 MSW program cost was \$20,000. The Mayor felt the General Fund could absorb this increased expense without implementing PAYT.

Outcome:

In mid-August 2000, the consultant received a letter from Mayor Zerr stating that the City was "suspending" its efforts to implement PAYT financing. In "follow-up" conversations with Task Force members, the consultant learned that political support for PAYT was not as strong as the committee believed it was. Apparently some committee members had spoken with individual council members. After conducting informal discussions, it seemed that a majority of council members opposed PAYT financing for MSW service. This lack of political support prompted the Mayor to suspend PYT planning efforts.

City of New Albany

Background:

This community organized a citizens "Trash Force" to look into strategies for improving recycling diversion and MSW program financing. Mr. Brad Marlow of the Floyd County SWMD led the Trash Force's PAYT financing efforts. The Floyd County SWMD contacted the AISWMD in February 2000 to arrange for a presentation regarding the PAYT Technical Assistance Project.

Activities and Barriers:

Step 1:

The consultant made a presentation to the Trash Force at the group's March 15, 2000 meeting. The meeting was attended by approximately 40 to 50 Trash Force members, City elected officials (Mayor and two council members), City MSW program staff, Floyd County SWMD staff members, an IDEM representative, and citizens.

The consultant made a PAYT informational presentation followed by a lengthy question and answer period. The Trash Force members asked many specific questions relating to PAYT operational issues while the citizens expressed more general concerns about PAYT's impact on recycling and illegal dumping. The consultant provided copies of the Skumatz SERA Illegal Dumping Study and discussed strategies used by other communities to combat dumping. The meeting lasted approximately 2 hours.

Following the meeting, the consultant met with Mr. Marlow to discuss the informational requirements pursuant to the PAYT Technical Assistance Project.

Step 2:

Due to his leadership role, Mr. Marlow undertook the task of gathering City of New Albany MSW program information in order to complete the AISWMD Local MSW Program Information Form. During the spring of 2000, Mr. Marlow and the consultant discussed the best ways to gather the information.

Barrier: It seemed that despite leading the City's PAYT research efforts, Mr. Marlow encountered resistance when he sought access to the City of New Albany MSW program information. In May 2000, Mr. Marlow contacted the AISWMD to ask if the PAYT Technical Assistance project could assist the City of New Albany in gathering the MSW program information. Unfortunately, the PAYT Technical Assistance Project did not include resources for the project auditing requested by the City.

In June 2000, the City contacted the consultant to contract for completing the AISWMD Local MSW Information Form under a separate contract. The consultant and Mr. Marlow discussed plans for a "site visit" to gather the necessary information.

During the summer of 2000, Mr. Marlow left the Floyd County SWMD to take a position with a private MSW collection company. The City's efforts toward PAYT financing seemed to end with Mr. Marlow's departure.

Outcome:

Since the summer of 2000, the City of New Albany has not pursued PAYT financing for its residential MSW program. In fact, the City of New Albany has reconsidered its municipal MSW program. The City of New Albany is in the process of the assessing the economic feasibility of privatizing its residential MSW program.

During the spring of 2001, the consultant contacted the current director of the Floyd County SWMD and the regional IDEM representative to discuss whether the City of New Albany had officially ended its PAYT investigations. (The consultant was unsuccessful in her efforts to contact the Mayor's administrative assistant.) Based on these discussions, it appears that the political/economic climate had changed. Due to financial concerns, the City became more interested in "over-hauling" its residential MSW program rather than changing the program's financing. In its efforts to reduce overall program costs, the City of New Albany is likely more interested in contracting-out or fully-privatizing the program than retooling the financing of the municipal collection arrangement.

City of Elkhart

Background:

The City of Elkhart presented the PAYT Technical Assistance Project with a different situation from any other community. The City of Elkhart's exclusive contract for residential MSW service included a three-can limit. The base household collection costs are financed from the General Fund, but households exceeding the three-can limit are required to purchase excess disposal units for \$0.75 each.

Barrier: The City's PAYT contract program had encountered a serious challenge: The MSW collection contractor was not enforcing the residential three-can limit. This is a problem inherent in contracted PAYT programs. The City, which establishes the can-limit, is not directly enforcing the can-limit. The economic pressure on the MSW collection company — and on the actual collection crew — is to collect an entire household set-out in one stop and not enforce the three-can limit. Refusing to collect unstickered excess trash creates an inefficiency for the collection company: A return stop to collect newly-stickered excess trash that was rejected in the original stop effectively doubles the weekly collection cost to serve that household.

The regional IDEM representative met with City of Elkhart representatives in the spring of 2000 to discuss environmental issues. The IDEM representative contacted the consultant to request that the City of Elkhart participate in the PAYT Technical Assistance Project. The consultant, in turn, contacted the City of Elkhart to arrange a meeting. The consultant also provided PAYT Technical Assistance Project program information to the City.

Activities and Barriers:

Step 1:

The consultant met with City of Elkhart representatives (Mr. Eric Horvath and Mr. Byron "Burne" Miller) on April 18, 2000 to discuss the City's participation in the PAYT Technical Assistance Project. The consultant explained that the project was intended to assist municipalities in assessing the economic feasibility of introducing PAYT financing for residential MSW service.

The City representatives wanted to participate in the program because they felt that, while the City had a PAYT program in theory, the enforcement issues reduced the economic incentive to reduce, reuse, and recycle. The City did not wish to assess alternative rate structures since the monthly household rate was established by the MSW collection contract and funded by the General Fund. The City's primary interest was in enforcing the contract requirement that required stickers for disposal units in excess of the three-can limit.

Barrier: Prior to the April 2000 meeting, the City had raised the enforcement issue with BFI, Inc. (the City's contractor for residential MSW service). The City believed that the enforcement issue could be addressed by enhanced public information. The City believed that there were groups of households in the City that were uninformed of the program and therefore did not use stickers when trash set-out exceeded the three-can limit. The inconsistent enforcement of the three can limit by the contractor undermined the City's efforts to promote the three-can trash limit.

Enforcement of the three-can limit was considered important for two reasons:

- (1) Promote waste reduction, reuse, and recycling; and,
- (2) Generate excess revenues to help finance program costs.

The consultant expressed the concern that the City should focus efforts on enforcement. The collection company's failure to enforce the can limit had essentially educated households that they could exceed the trash level without any financial penalty. Any efforts to educate households about the can limit would be undermined unless the can limit was actually enforced.

The City countered that it believed that those violating the can limit were uninformed as to the can limit. Mr. Horvath mentioned that the City had conducted a household survey and identified demographic groups that were less likely to recycle and more likely to need to use excess disposal unit stickers. The City wanted to educate these groups in advance of the enhanced enforcement efforts.

Step 2:

The City of Elkhart established its PAYT rate structure through the contracting process. The City was not interested in developing alternative rate structures. The consultant provided Mr. Miller with the AISWMD Local MSW Information Form in order to gather information on the City's MSW program. This information would be used to assess household trash and recycling information. Based on household trash patterns, waste reduction and recycling improvement themes could be developed.

The consultant and the City scheduled a "brainstorming" session to discuss educational activities and materials the City desired for the enhanced education program. The consultant met with Mr. Miller on June 27, 2000 for this session. The consultant asked the City for direction on the educational materials and target audiences for the City's educational efforts. The City felt it was important to develop a targeted mailing for low-income families since this group would be negatively impacted once the City enforced the three-can limit.

The consultant discussed the AISWMD Local MSW Program Information Form and requested that additional information was necessary to develop targeted educational materials. The consultant requested a copy of the findings of the household survey mentioned by Mr. Horvath in the April 2000 meeting as an additional source of household trash and recycling information.

One of the topics covered in this meeting was the operational difficulty of enforcing the three-can limit. Specifically, when households violated the limit and the trash collection vehicle enforced the limit (i.e., the collection truck did not remove excess trash unless it had a sticker) households called the City or elected officials to complain. Usually, a trash collection truck or the contractor's route supervisor would return to the household and make a special collection of the still unstickered trash. Such incidents contributed to the collection vehicle crew collecting unstickered excess trash as more expedient than having to pick up the excess trash at a later time in the day.

Another issue discussed was whether the City might be interested in purchasing a 90 to 96 gallon container to standardize the City's three-can trash limit. The equipment expense associated with a can program is sizable and grant money would be required to implement it. Unfortunately, the IDEM Recycling Grant Program, which promotes PAYT programs, does not fund the equipment expense for a container-based PAYT program.

The consultant contended that enforcement and not education was the problem. This was the same problem encountered in the Town of Winfield when field audits discovered unstickered trash was routinely picked-up. The Town of Winfield handled the matter as a contract compliance issue. The Town decided to monitor trash sticker sales to verify that households were not cheating the system.

The meeting did not result in developing a clear educational theme for the City's enhanced enforcement educational initiatives. The City agreed to provide the additional information necessary to develop a targeted mailing to low-income households.

Step 3:

In August 2000, the City of Elkhart provided the consultant with copies of presentation overheads apparently used to summarize the findings of a 1995 household survey conducted by Elkhart's Envirocorps group. The summary information did not include disaggregated data for low-income households. Nor did this information packet include the MSW program information (except costs) used for the PAYT Technical Assistance Project.

Outcome:

Because the consultant did not receive the completed AISWMD Local MSW Program Information Form, the consultant did not pursue work on the City of Elkhart's PAYT educational program.

During the fall of 2000 the consultant became extensively involved in other PAYT Technical Assistance Project communities. In retrospect, the consultant believes she should have pressed the City more to provide the necessary information in order to advance the educational efforts.

The most significant barrier encountered in the City of Elkhart was inconsistent (if not non-existent) enforcement of the three-can limit. Enforcement was not a barrier to the planning or introduction of PAYT, but a barrier to the effective implementation of the PAYT program. In theory and by resolution, the City of Elkhart has a PAYT program, however inconsistent enforcement of the three-can limit—by the collection personnel—has reduced the incentive the program gives residents to reduce, reuse, and recycle.

Non-enforcement can have significant negative impact on the effectiveness of a PAYT contract program. The City of Elkhart demonstrates that contract PAYT programs need to include economic incentives *to the collection company* to ensure that it is in the contractor's interest to enforce the can limit. A strategy to address this is to have the sale of excess trash stickers as a direct transaction between the collection company and the household. In this setting a collection company may still fail to enforce the can limit however the collection company will bear the lost revenue not the municipality.

Sullivan County SWMD

Background:

This District serves a rural area south of Terre Haute, IN. The District provided a drop-off recycling program for the county. The Town of Sullivan has the only organized residential trash collection program in the County. The District was interested in a rural drop-off PAYT program similar to services offered by other districts. The Sullivan County SWMD wanted to use PAYT revenues to finance drop-off trash and recycling program costs.

The District's Education Coordinator, Sandy Drake, contacted the AISWMD during the spring of 2000 to inquire about participating in the PAYT Technical Assistance Project. The District requested a presentation to its Board. This presentation was arranged for June 2000.

Activities and Barriers:

Step 1:

The consultant made a presentation to the Sullivan County SWMD Board on June 13, 2000. The consultant presented rural drop-off PAYT program information. The consultant discussed the tasks necessary to plan and introduce PAYT.

The District Board unanimously supported participating in the PAYT Technical Assistance Project. However, individual board members expressed concern about "undesirable diversion" in the form of illegal dumping, burning, or burying of trash. The consultant explained that most Indiana PAYT communities had not reported *increases* in undesirable diversion following PAYT introduction. The Board members and consultant discussed that there were residents presently engaging in undesirable diversion and that this presented a challenge to the County independent of PAYT efforts.

The Board discussed enforcement strategies to combat undesirable diversion. The Board expressed the concern that the County history as a mining community complicated enforcement since many

miles of rural roads had no residential properties, thereby reducing the likelihood that residents would see and report illegal dumping.

Based on the questions and answer component of the presentation, it was clear that the Board had considered PAYT financing as an important opportunity for the District. However, because the Board had not identified the costs of establishing a rural trash collection program, the financial reality of a rural PAYT program was not considered.

An important difference between the Sullivan County SWMD and other PAYT Technical Assistance communities is that this community included a *prospective* trash collection program. To this point, participating communities were considering changing the financing of an existing residential MSW program. While other participating communities were able to complete the AISWMD Local MSW Program Information form using existing records, the Sullivan County SWMD had no information—beyond its drop-off recycling program—at its disposal.

Barrier: The PAYT Technical Assistance Program had not considered nor provided for the development of residential MSW programs. It was clear from the consultant's discussions with the Sullivan County SWMD that no drop-off trash collection specifications or budget estimates had been prepared. The consultant was not able—under the provisions of the project—to assist the District in formulating a rural drop-off trash program. The absence of an existing program was a barrier that was underscored by the consultant's inability to assist in program formulation.

The consultant provided the AISWMD Local MSW Program Information Form to the District's treasurer who was tasked with completing it. This form, however, was not completed and returned to the consultant.

Outcome:

The Sullivan County SWMD did not continue PAYT planning activities beyond initial discussions regarding drop-off trash collection costs. The consultant speculates that the District had expected the consultant to assist in program formulation and budget preparation. Inasmuch as the consultant said these services were not provided, the District's interest seemed to wane. Unfortunately, the PAYT Technical Assistance was not equipped to provide the extensive technical assistance required for this District. The consultant has attempted to contact the Sullivan County SWMD to discuss its plans for the rural drop-off program and learn whether political support had increased, however the District has not returned these calls.

Town of Utica

During the summer of 2000, the Town of Utica's Clerk-Treasurer, Sandy Martin, contacted the Executive Director of the AISWMD about participating in the PAYT Technical Assistance Project. The Town had no involvement in residential trash collection. The Town was interested in establishing a program for residential trash service only. (The Town did not wish to include curbside recycling since this service was to be provided by the Clark County SWMD under a contract program scheduled to begin January 1, 2001.)

The consultant contacted the Clerk-Treasurer to discuss PAYT program options. The consultant arranged to meet with the Town Clerk-Treasurer in September. The Clerk-Treasurer explained she had prior discussions with the Clark County SWMD and was very interested in a PAYT trash program to keep rates as affordable as possible. The Town had received numerous complaints from residents that subscription service was too expensive for many people. The Clerk-Treasurer wanted to arrange a meeting as soon as possible to allow the Town trash program to start at the same time as the District's curbside recycling program.

Activities and Barriers:

Step 1:

The consultant met with Clerk-Treasurer on September 11, 2000. The consultant explained the services offered under the PAYT Technical Assistance Project. The Town was very interested in establishing a PAYT program, but had not selected a program type or rate structure option. The Town was interested in exploring whether a municipal or exclusive contract program should be introduced. The Clerk-Treasurer and consultant discussed the start-up costs associated with a municipal program. Because the community had only 400 households, the Clerk-Treasurer and the consultant concluded that the Town was not a good candidate for a municipal program.

The Clerk-Treasurer stated that she had conducted an informational hearing with representatives of private MSW collection companies operating in the southern Indiana area. She stated that each company was interested in bidding on a municipal contract for the Town's trash service.

The consultant and the Clerk-Treasurer discussed the Town's preferences for trash service. The consultant reviewed typical components of MSW contract specifications to gauge the Town's interests in service. The Town had not decided whether it wished to be responsible for trash billing. The consultant mentioned that the specifications could be written to consider both Town and contractor billing.

The Clerk-Treasurer and the consultant agreed that the consultant would provide a copy of specifications for a PAYT trash collection program. The two agreed that the specifications had to developed rather quickly to accommodate the Town's January 1, 2001 start-up date.

Step 2:

The Town of Utica did not complete an AISWMD Local MSW Program Information Form because there was no existing MSW program. Rather, the Town of Utica would rely on its prospective bid prices to identify program costs for the trash program.

Step 3:

The consultant provided the Town with model PAYT contract specifications on September 15, 2000. The Town provided its revisions to the specifications on October 6, 2000. The consultant completed the revisions and returned the final version to the Town. The Town, in turn, issued the specifications at the Town Council's regularly scheduled meeting. A Pre-Bid Conference was scheduled for Thursday, October 26, 2000.

Step 4:

The consultant, the Clerk-Treasurer, one Council member and four representatives of private MSW collection companies (Republic, Waste Management, Rumpke, and BFI) attended the Pre-Bid Conference Meeting on Thursday, October 26, 2000.

Barrier: Despite the private companies prior expressions of interest in a municipal contract, the PAYT options found in the specifications received a chilly reception. One MSW company representative was vehemently opposed to PAYT financing contending that the "administrative costs for the program would double the cost of service." While other representatives were less vocal, none was particularly supportive of PAYT financing.

The pre-bid conference lasted approximately 150 minutes. The MSW company representatives raised objections to most specification provisions, not just PAYT components. The representatives debated amongst themselves over the necessity of several provisions, most notably the insurance and retainage stipulations. The Clerk-Treasurer was amenable to changing the specifications in response to each and every objection raised by the MSW company representatives. The pre-bid conference resulted in broad and sweeping changes to the Town's specifications for MSW service.

The Clerk-Treasurer asked if PAYT options could be eliminated from the specifications as the company representatives had suggested. The consultant said this could be done however such a change would result in the consultant's inability to participate further in the Town process. With that, the Clerk-Treasurer agreed to retain the PAYT options, but it was clear her interest in PAYT had diminished. At the MSW company representatives suggestion, the only remaining PAYT option was a 96-gallon service level that included a uniform container.

Essentially, the only PAYT option remaining was considered by the consultant to be the most expensive PAYT program option due to the equipment expense of \$35 to \$45 per household. Following the Pre-Bid Conference, the consultant reported to the AISWMD and IDEM-OPPTA project principals that the likelihood of establishing a PAYT program in the Town of Utica were slight.

Rather than issue an addendum to the specifications, the consultant completely revised the specifications because the changes were so numerous and sweeping. The Town of Utica forwarded the revised specifications to the company representatives.

Step 5:

The Town sent copies of the MSW company bid packages to the consultant. The consultant spoke with Ms. Martin following the bid opening to discuss the company submittals. The Town of Utica Bid Analysis spreadsheets are offered as Appendix E. Even before the bid analysis was completed, the Town seemed prepared to award an "unlimited trash service contract" to Industrial Disposal, a division of Republic Waste.

Step 6:

The Town of Utica Town Council decided to award a contract to Industrial Disposal for unlimited trash service. The Town contracted for the billing of the trash service, but believed it would be able to take over this activity in a year or two.

Outcome:

Following the Pre-Bid Conference it seemed unlikely that the Town of Utica would implement PAYT financing as part of its trash contract program. The fact that the only PAYT option was considered the most expensive PAYT option reduced the likelihood that the Town of Utica would adopt PAYT.

The most significant barrier encountered by the Town of Utica was private MSW contractor unwillingness to participate in a PAYT trash program. This unwillingness seemed to be based on regional unfamiliarity with PAYT, as well as the fact that this was a relatively small community that companies felt could not justify or support the administrative expense of PAYT. The consultant believes the lack of commitment to PAYT from the Town representatives contributed to the elimination of economically-competitive PAYT options from the specifications.

The Town of Utica example indicates how serious a barrier contractor unwillingness to participate in a PAYT program can be to efforts to expand PAYT service in Indiana. This is considered a regional issue, since other subsidiaries of the same companies are willing to participate in PAYT MSW programs in other parts of Indiana.

City of South Bend

Backgound:

With 100,000 residents, the City of South Bend is the largest community to participate in the PAYT Technical Assistance Project. The City of South Bend operates a municipal residential trash collection program. Residents receive curbside recycling through a County-wide contract program run by the Saint Joseph County SWMD. The City financed trash collection and disposal through flatrate user fees that fully fund program costs.

During the summer of 2000, City representatives contacted the IDEM-OPPTA Regional Representative about strategies to improve waste reduction and recycling. Mr. Jim Weingart contacted the consultant to work with the City of South Bend. The City was interested in PAYT to reduce trash volume and improve recycling, as well as improve the fairness of the rate structure. The City of South Bend's Director of Public Works, Gary Gilot, P.E., was responsible for implementing PAYT in the City of Elkhart.

Activities and Barriers:

Step 1:

The consultant met with Dr. Jack Dillon, Director of Environmental Services on June 19, 2000 to discuss the City's participation in the PAYT Technical Assistance Project. The consultant explained the objectives of the programs, as well as some PAYT trends for larger communities. The consultant explained that PAYT programs are, generally, better received in communities currently using flat-rate user fees than those relying on General Fund revenues. The Director was specifically interested in making sure low-income residents would not be negatively impacted. The Director wanted to ensure that non-English speaking residents could be served through the education program.

The community was interested in a three-can or 96-gallon container program. The City was specifically interested in PAYT because it was hoped that the economic incentive to reduce, reuse, and recycle would offer a effective senior citizen discount.

The City utilizes the Southeastern Berrien County (Michigan) Landfill. The City paid \$17.00 per ton for disposal. The City already had a code enforcement officer, so the added costs to introduce PAYT enforcement were not considered too high.

The consultant explained the AISWMD Local MSW Program Information Form to Dr. Dillon. The Director felt the City would not have any trouble putting together the necessary information.

Step 2:

In August 2000, the Director of Environmental Services met with AISWMD Executive DirectorMark W. Davis and the consultant to discuss the project. Most of the conversation involved the technical support AISWMD provides to cities, towns, and SWMDs through the PAYT Technical Assistance Project. The meeting also addressed the costs and program information required for the project.

In November 2000, the City provided the completed the AISWMD Local MSW Program Information Form.

Step 3:

Over the winter of 2000 - 2001 the consultant spoke with Dr. Dillon several times to clarify cost and program data, as well as identify City preferences for PAYT service options. The consultant contacted three trash container manufacturers to get prices for 90 to 96 gallon wheeled containers. The consultant developed multiple rate scenarios for the City of South Bend. These were sent to the City for its review and subsequent revisions.

Step 4:

The consultant met with Dr. Dillon in February to go over the various rate structure types and rate schedule options. The consultant explained the different rates involved using a three-can trash limit and a containerized program. The City's costs for a containerized program would be recovered through a monthly equipment fee, however, the purchase of containers would require an initial outlay from the City.

The Director asked if the spreadsheets could be updated to include year-end information from 2000. The updated data were provided to the consultant and the revised spreadsheets were submitted to the City in March 2001. Dr. Dillon asked if the consultant could provide the original spreadsheets to him so he could manipulate the rates and costs as needed. The consultant provided these Lotus-based spreadsheets to him. These spreadsheets are offered as Appendix F.

Step 5:

The consultant spoke with Dr. Dillon in the Spring of 2001 to inquire about the City proposing a PAYT program proposal. Dr. Dillon reported that he was very optimistic that the City of South Bend would pursue PAYT financing. He further stated that remarks made by the Mayor indicated that the political climate was favorable for introducing PAYT. The consultant offered her assistance to the City in those efforts.

Outcome:

The City of South Bend was interested in residential PAYT financing as part of a larger strategy to control and reduce municipal MSW costs. Dr. Dillon reported that the City has not taken official

action to adopt PAYT, but is still considering it. The City's cost reduction efforts for FY 2002 involved initiatives to hold down other MSW program costs.

The City's interest in the ability to use the PAYT spreadsheets—on its own—to assess the economic feasibility of PAYT rates prompted the consultant to consider whether standardized spreadsheets could be developed for use by other communities. Upon consultations with the IDEM-OPPTA project manager, it was determined that such an activity could be pursued. This became a new objective of the project to be included in the Indiana PAYT Tool-Kit.

City of Warsaw:

Background:

The City of Warsaw became the last community to participate in the direct technical assistance phase of the project. The consultant made a formal recruiting presentation to the City in the fall of 1999. At that time the City was interested in implementing PAYT rates in conjunction with curbside recycling. However, the City did not participate in the PAYT Technical Assistance project because the consultant could not assist in formulating a curbside recycling program.

In the spring of 2001, the City again contacted the consultant and expressed its desire to move forward with PAYT activities.

Step 1:

The consultant met with City of Warsaw representatives (Mayor Ernie Wiggins and Street Commissioner Lacy Francis) on April 24, 2001. At that time the City said it still had not formulated a curbside recycling program nor had it prepared budget estimates. The consultant said she could provide the City with basic cost of service information for municipal and contract recycling service, however, she could not (as they were informed in 1999) develop a recycling program for them.

The consultant provided the City with the AISWMD Local MSW Program Information Form. The Street Commissioner was tasked with providing these data.

Step 2:

In June the City requested another meeting with the consultant to discuss PAYT. The consultant stated that she preferred to have the completed MSW information prior to scheduling another meeting. The City said it wanted to explain the form before providing it. On June 26, 2001 the consultant met with the City representatives to discuss the form. At this meeting the City provided the consultant with the completed form. The City had not yet decided whether to establish a municipal or contract curbside recycling program. The consultant said she could develop PAYT for trash service only and the City could include the recycling costs as a fixed cost funded from the General Fund or flat-rate user fees.

Step 3:

The consultant developed PAYT rates for trash only. These are offered as Appendix G. These spreadsheets were provided to the City on July 31, 2001.

Step 4:

City of Warsaw representatives discussed their interest in PAYT with the consultant and IDEM-OPPTA's Robert Gedert at the August PAYT workshop session. The City reiterated its interest in seeking assistance to formulate a curbside recycling program as an integral component to its PAYT introduction efforts. The consultant and Mr. Gedert agreed that linking a new curbside recycling with the introduction of PAYT fees was a good strategy to build public support for PAYT financing.

Outcome:

The City of Warsaw remains committed to pursuing PAYT rates for residential MSW service. The City is still considering its options for PAYT. The City has accepted Mr. Gedert's offer to provide technical assistance for developing a curbside recycling program. The consultant believes this community will likely establish curbside recycling and PAYT in 2002 or early 2003.

Lessons Learned from the Direct Technical Assistance Phase

Based on the direct technical assistance phase of this project, the consultant believes that communities entered the project with varying levels of interest in and commitment to PAYT financing for MSW service. Some communities participated in the project as a means of investigating PAYT in theory, rather than having a strong commitment to actually pursuing a new financing approach. These communities participated in the process until such time as they determined (albeit informally) that PAYT did not offer the rewards they felt it would.

This development demonstrates a misconception that many elected officials and MSW program manager hold regarding PAYT financing. Solid waste management literature is replete with examples of how PAYT can reduce trash sent to landfill by an average of 40%. These reports generate great interest in PAYT as many individuals believe this trash reduction corresponds to a 40% reduction in *overall MSW costs*. Despite significant educational efforts by US EPA, IDEM-OPPTA, SWANA and other groups that stress PAYT program decreases in *disposal* costs, many continue to expect unrealistic cost reduction from PAYT financing. The consultant speculates that when communities recognize that PAYT financing can directly and significantly reduce disposal costs *only* and may possibly (depending on program features) result in reducing fixed costs, these individuals lose their enthusiasm for PAYT.

To the extent that communities participating in the PAYT Technical Assistance Project have a greater understanding of MSW program economics and the role of PAYT financing in reducing disposal costs, the project has made a significant contribution to educating local MSW program managers and elected officials.

The most important lesson learned during the direct technical assistance phase of the project is that most communities considered PAYT primarily as a "revenue source." Community interest in PAYT financing was always referenced against current financing methods. Community consideration of PAYT was not simply the economic feasibility of volume-based rates for household MSW service. Factors beyond the influence of IDEM-OPPTA, AISWMD, and the consultant weighed heavily in favor of the "status quo" regarding MSW service financing.

Most communities considered PAYT as a substitute for increasing tax rates or raising flat-rates for MSW service. Communities were generally more concerned about the political feasibility of

implementing PAYT than its economic feasibility. It is safe to say that while MSW program costs have steadily increased in recent years, most elected officials and MSW program managers feel these costs are more easily absorbed —in a political sense—by the General Fund than by introducing a user fee program. No community participating in the PAYT direct technical assistance project felt it was facing the type of financial crisis necessary to implement PAYT.

It appears that for most participants, researching PAYT financing was an "exploratory" effort. The consultant bases this speculation on the facts that no community had an expressed preference for a PAYT option or rate structure. This is supported by the fact that some communities did not even complete the AISWMD Local MSW Program Information Form which was required to proceed in the project activities.

For those communities that were sincerely interested in assessing the economic feasibility of PAYT financing, the direct technical assistance phase offered tremendous benefits. The extensive rate structure development and revenue stream analysis activities provided the participating communities with a great deal of information on how PAYT financing choices and waste reduction can significantly impact MSW program disposal costs.

The consultant is confident that as a result of this project community elected officials and MSW program manager are very aware of the benefits of PAYT financing. The consultant further believes that when elected officials and MSW program managers believe the political climate is "right" and the financial situation demands a change in financing, the participating communities will be prepared to proceed with PAYT. The communities can utilize the Indiana Modified PAYT Rate Structure Development Spreadsheets to update their financial analysis when a decision to proceed is made.

"Pay-As-You-Throw" Technical Assistance Project Final Report Section 3: Indiana PAYT Community Database and Case Studies

Background

The Indiana PAYT Technical Assistance Project included two activities to research and document existing local PAYT programs in Indiana. These two activities were:

- (1) Indiana PAYT programs database including community characteristics, program option, rate structure type, and rates; and,
- (2) Preparation of ten Case Study documents providing more detailed community PAYT program information.

The tasks associated with these activities are described below.

Database Development

The solid waste management district survey mentioned in Section 1 asked respondents to identify existing PAYT programs in their district, as well as suggest prospective participants for the direct technical assistance phase of the project. The database development activities involved contacting reported PAYT programs to confirm that the local trash program was, in fact, a PAYT program.

One reason the database development task was included in the project was to confirm the Indiana PAYT programs listed on the US EPA PAYT website. This was necessary since many communities were not included in IDEM-OPPTA PAYT program lists.

During the winter and spring of 2000 the consultant contacted communities identified as PAYT to gather program information as the first step in the database development process. The initial telephone calls enabled the consultant to confirm approximately 20 of Indiana local PAYT programs.

The confirmation process succeeded in clarifying information reported in the US EPA website for the following reasons:

- (1) Multiple communities participating in the same regional rural drop-off PAYT program were reported as separate PAYT programs;
- (2) Some communities that had stickered yard waste collection programs were included as MSW PAYT programs. (For current purposes, volume-based yardwaste only programs were not considered PAYT programs and these communities were eliminated from the list.); and,
- (3) Inasmuch as the US EPA website reflected self-reported data from communities, some communities with private subscription or flat-rate user fees considered *themselves* PAYT communities when, in fact, they were not actually volume-based PAYT programs.

The initial follow-up activities eliminated many communities from the US EPA website list.

The second step to confirm Indiana's reported programs involved a "second wave" of phone calls during the fall/winter of 2000. This effort added a few PAYT programs to the list of confirmed communities. A barrier to the telephone interview process appeared to be that many residential MSW programs were managed by street commissioners or public works directors whose duties resulted in a great deal of time out of the office.

The third step in the confirmation process recognized the difficulty in reaching these busy program managers. During the winter/spring of 2001, the consultant distributed a mail-out/fax-back survey. The mailed out surveys resulted in a total of 35 confirmed local PAYT.

Those communities which did not respond to the survey were faxed an identical survey and asked to respond. This approach proved highly successful at reaching most of the communities, which had not responded to earlier confirmation efforts. The consultant conducted a "final round" of telephone calls during the spring of 2001. The result of the mailed and faxed surveys boosted the number of confirmed local PAYT to 42.

The consultant completed PAYT program confirmation activities during the spring of 2001. The result of these activities is presented as Appendix I.

Case Study Preparation

The US EPA PAYT promotion and research activities resulted in the preparation of several PAYT community case studies. As a parallel to the US EPA case studies the consultant prepared a series of ten PAYT case studies for Indiana communities.

The communities selected for the case studies were considered "model PAYT" programs for two reasons:

- Innovative PAYT planning and implementation activities;
- Successful strategies to address barriers;

The communities selected as Indiana Model PAYT Programs are:

- City of Crawfordsville municipal collection;
- Monroe County SWMD rural drop-off;
- City of Greencastle exclusive contract;
- City of Tell City municipal collection;
- Town of Winfield exclusive contract;
- Town of Hebron exclusive contract;
- City of Bloomington municipal collection;
- Southeastern Indiana Solid Waste District coordinated regional approach to PAYT;
- Town of Merrillville license authority requiring PAYT subscription service; and,
- Town of Syracuse exclusive contract.

These programs offer a glimpse into the great variety of PAYT programs found in Indiana. The collection of PAYT case studies is provided as an enclosure to the final report. Where are these case studies?

Lessons Learned from the Database Creation and Case Study Preparation

A few lessons were learned during the Database Development and Case Study Preparation components of the PAYT Technical Assistance Project. These lessons are identified as:

- (1) There appears to be some confusion among MSW program managers as to what constitutes "payas-you-throw" MSW service. Notably, many consider user fees or subscription fees as PAYT programs.
- (2) Even within communities where actual PAYT programs exist, some municipal staff members do not recognize their programs as PAYT programs. Many communities did not respond to informational requests because they did not believe they had PAYT programs;
- (3) Gathering local MSW program information is not a straightforward process. It took several efforts and various strategies—to gather program information; and,
- (4) Tracing program financing (revenue from PAYT rates and other sources) was difficult.

These "barriers" indicate the need for greater coordination in the use of definitions related to MSW program options. The difficulty in gathering MSW program data may reflect that local reporting of residential MSW program data is not as sophisticated or as widely-accessible as it could be.

Any efforts to gather similar information in the future should be structured to included multiple attempts to gather information and acknowledge that the resulting database may be incomplete.

"Pay-As-You-Throw" Technical Assistance Project Final Report Section 4: Private MSW Collection Company Meetings

Background

Private MSW collection companies provide residential MSW service to many areas in Indiana. Whether this service is private subscription programs offered in unincorporated areas, cities and towns that lack an organized collection program, or in municipal contract collection programs, private MSW collection companies are extensively involved in the provision of MSW service throughout the state. Recognizing the role of private MSW collection companies, the PAYT Technical Assistance Project included expansion of PAYT programs offered by private MSW collection companies as a project objective. The PAYT Technical Assistance Project approached this objective by seeking meetings with private MSW collection company representatives in an effort to encourage volume-based subscription service.

In some parts of Indiana private MSW collection companies offered the first PAYT service programs. In the early 1990s MSW companies recognized the marketing advantage of offering can limit programs. Due to the relatively higher costs of subscription MSW service, volume-based subscriptions provided households with affordable MSW service.

In the last five years, however, there has been a contraction of subscription-based PAYT programs. Local collection companies that had offered several different service levels reduced these to one-can or 96-gallon container programs. There are various reasons for this contraction. One company reported that it had experienced operational problems trying to enforce multiple service levels. Basically, the collection crew had difficulty keeping track of individual customer's trash service level. Reducing service levels from several to one option, made it easier for collection crews to enforce the service levels.

Other solid waste industry observers offer a different rationale for the contraction of volume-based subscription service. In the last five to ten years there has been a trend toward "consolidation" within the solid waste industry. During this period, regional and national MSW companies acquired smaller independent MSW collection companies. In the Midwest—where private companies, not public agencies, generally own sanitary landfills—the acquired collection companies become vehicles for ensuring trash flow to corporate-owned landfills. In the last five years, smaller collection companies have seen their priorities change from concern over minimizing their own disposal fees—using PAYT subscription offerings—to maximizing trash flow to the corporate landfill. The contraction of PAYT offerings seems to be a logical outcome of the consolidation within the solid waste industry.

In an era of solid waste management consolidation, encouraging PAYT subscriptions for those not served by organized MSW collection programs proved challenging. The PAYT Technical Assistance Project took a careful approach to encouraging private company PAYT programs. This approach involved informational meetings with private MSW company representatives. This section details the activities involved.

PAYT Promotion Meeting Activities

IDEM-OPPTA initiated these activities by sending a letter to each private MSW collection company operating in Indiana. This letter informed the company of the state's PAYT initiative and the reasons the state was advocating volume-based subscriptions. This letter also offered the company an opportunity to meet with an IDEM-OPPTA representative or the consultant to discuss strategies for introducing PAYT. Unfortunately, there were just a few MSW collection companies interested in discussing PAYT service options.

Illiana Disposal (Northwest Indiana Division of BFI, Inc.):

In December 1999, the consultant met with three representatives of Illiana Disposal, a division of BFI, Inc. serving Northwest Indiana through exclusive contracts and subscription service. The meeting included the General Manager, the Route Supervisor, and the Municipal Contracts Representative for the MSW collection company. Illiana Disposal began offering subscription service in the early 1990s. The company also serviced Lake County's only PAYT program, the Town of Winfield. The company has reduced its volume-based offerings to a single can program, down from various service levels offered several years ago.

Given this company's history of leading local PAYT subscription efforts, the consultant expected the company to be receptive to the expanding PAYT service. However, this was not the case. The company complained about recurring delinquency problems associated with the Town of Winfield because the Town also contracts billing and collection from Illiana Disposal. (Despite the company's complaints the delinquency rate for Winfield is approximately 2%, which is less than reported delinquency rates for subscription service.)

It seems that Illiana Disposal's complaints regarding the Town of Winfield are not due to the PAYT contract. Rather, the complaints are reflective of typical contract program related complaints. The company, however, uses these issues in arguments against further expansion of PAYT service.

The consultant, who has worked with Illiana Disposal on various projects since the early 1990s, has observed a marked decrease in the company's support for PAYT programs. The consultant speculates that this change reflects the corporate philosophy of BFI, Inc. The company did not seem interested in expanding PAYT service. The tone of the company representatives could be characterized as reluctant acceptance of PAYT "if a community really wants it." But the term "nightmare" was used repeatedly to describe the company's experiences with it. The encounter was more of a gripe session in which the company representatives attempted to convince the consultant that PAYT was not an effective solid waste management strategy. The meeting did not result in a greater willingness on the part of Illiana Disposal to expand PAYT MSW service

Rumpke Disposal (serving central Indiana):

During the spring of 2000, three central Indiana communities that were interested in introducing PAYT in their exclusive contract contacted the consultant. After conversations and/or presentations by the consultant, the communities were advised to contact their MSW contractor—Rumpke of Indiana—to discuss the possibility of introducing PAYT into the contracts. Despite strong interest in PAYT financing for residential MSW service, all three communities were "locked into" long-term contracts and Rumpke reportedly was not amenable to offering the communities any incentives to reduce trash volume.

Based on these developments, the consultant and Rudy Osenbaugh, former IDEM-OPPTA grant administrator, discussed meeting with Rumpke Disposal representatives to explain the benefits to both the company and its municipal clients. This meeting was scheduled for May 29, 2000. Those attending the meeting were Ms. Osenbaugh, the consultant, and Steve Atkinson, the Rumpke municipal contracts representative.

The meeting addressed two issues: strategies to introduce PAYT in existing contract programs and expansion of PAYT service through private subscription offerings. Mr. Atkinson stated he had familiarity with several Ohio-based PAYT programs and that Rumpke felt these were successful programs for municipalities and the company. With respect to introducing PAYT into existing municipal contracts, the company was receptive to introducing PAYT. However, the company was not interested in reducing contracted prices during the contract period due to PAYT.

When the discussion turned to expanding PAYT to subscription programs, the company's position was interesting: Rumpke was interested in introducing PAYT subscriptions *only* in new areas not currently served by the company. This position is similar to other MSW collection companies. The companies support the concept of PAYT and recognize the popularity of PAYT with customers. But, MSW collection companies view PAYT as a "marketing strategy" not a solid waste management strategy. The Rumpke approach took this marketing strategy to a new level: the company would expand PAYT to gain customers in a new market, but would not offer economic incentives to reduce to its existing customers. The Rumpke representative said he would be interested in participating in the PAYT Technical Assistance Project if the program could help him launch subscription service in new markets.

Following the meeting, the consultant and Ms. Osenbaugh discussed the appropriateness of working with Rumpke to expand PAYT subscription service *only in new markets*. The two discussed the relative advantages and disadvantages of assisting Rumpke in expanding PAYT subscription service. Both the consultant and Ms. Osenbaugh concluded that it would be problematic to use project resources to help a company attract customers while launching service in a new market. Given the political and legislative climate in which some smaller MSW collection companies believe IDEM resources and regulations have placed them at a competitive disadvantage, working with Rumpke – even if it would increase PAYT subscription service—would raise serious issues for the PAYT Technical Assistance Project.

Joint Meeting with Companies Serving Floyd and Clark Counties:

During October 2000, the consultant participated in a Pre-Bid Conference for the Town of Utica. This meeting included MSW collection company representatives from the Louisville, KY regional offices of Waste Management, BFI, Inc., Republic, Inc., and Rumpke Disposal, Inc. During the course of this meeting, the consultant had the opportunity to explore the attitudes of these companies toward PAYT financing.

There was general acceptance of the company's responsibility to participate in PAYT programs *if municipal contract communities demanded it.* Three of the company representatives cited successful PAYT programs in the Cincinnati, OH area. However, the Republic Waste representative was vehemently opposed to PAYT financing stating his company, "would do it, but would include all

administrative costs on the municipality." This individual believed that PAYT service options would, as a result, be uncompetitive and financially-unfeasible.

The company representatives believed that the size of a community would impact their willingness to participate in a PAYT program. All expressed concerns that the administrative costs associated with establishing a PAYT program could be more efficiently distributed in larger communities, not one as small as the Town of Utica with 400 households. The Republic Waste representative stated that the enforcement of a PAYT program (i.e., verifying trash was properly stickered or placed in special bags would "more than double" the collection time for the program. While the other collection companies doubted this claim, all agreed collection time would increase in a PAYT community.

None of the collection company representatives expressed a willingness to expand PAYT through private subscription service. Each collection company representative stated that subscription costs reflected significantly higher fixed costs than contract programs. The representatives said that because disposal costs were such a small cost component in their prices residents would see only minimal discounts for reduced trash levels using volume-based subscriptions. None felt that PAYT subscriptions could significantly improve company market share within their respective service areas. Each representative conceded that avoidance of trash service by residents was a problem for rural southern Indiana.

The Town of Utica Pre-Bid Conference enabled the contractor to gauge private MSW collection company corporate attitudes for the southern Indiana region. The contractor found the level of resistance to PAYT—whether in a contract or private subscription setting – to be stronger than other regions of the state. This regional variation has implications for efforts to expand PAYT service in areas served by Louisville, KY-based MSW companies. The consultant speculates that future PAYT initiatives will encounter strong contractor resistance. Efforts to establish PAYT programs or expand PAYT subscriptions may be limited to only those communities where elected official commitment to PAYT is unshakable. The retreat by the Town of Utica from PAYT in the face of contractor resistance does not bode well for expanding PAYT programs in this region of the state.

Lessons Learned from Private MSW Company PAYT Promotion Meetings

It appears that the major lesson learned from the meetings with private MSW collection companies is that there is palpable resistance to expanding PAYT subscription service. One encouraging sign was that all private MSW collection companies conceded that they would participate in PAYT programs if their "customers really wanted it." From this perspective it appears that private MSW collection companies operating in Indiana will not lead efforts to expand PAYT service, but they will participate in PAYT programs to maintain their market share.

Future efforts to promote PAYT opportunities for subscription service customers should concentrate on stimulating the demand for volume-based rates. The Town of Merrillville, which requires any private MSW collection company operating in the community to offer a PAYT subscription level can serve as an important model. By encouraging cities, towns and counties without organized collection programs to establish licensing requirements that include PAYT service seems to be the most effective strategy to expand PAYT subscription service.

Promoting creation of license authorities that include PAYT subscriptions is expected to have the added benefit of providing rural residents with <i>affordable</i> subscription service thereby reducing economic incentives to burn trash, bury trash, or engage in other undesirable diversion practices.	

"Pay-As-You-Throw" Technical Assistance Project Final Report Section 5: Pay-As-You-Throw Workshop Activities

Background

During the direct technical assistance phase of this project, the consultant and IDEM-OPPTA representatives spoke with community elected officials and MSW program managers who wanted to learn more about PAYT financing. These individuals were unable to participate in the earlier phase of the project because the community lacked broadly-based support for PAYT financing. Solid waste management districts were another group that was underserved by the direct technical assistance portion of the project. These organizations were not interested in establishing PAYT programs themselves, but were very interested in assisting their member municipalities in doing so.

During a March conference call among program participants, the group agreed that a series of workshops would enable the PAYT Technical Assistance Project to serve the above-mentioned groups. The consultant and IDEM-OPPTA representatives developed a summer workshop program specially-designed to meet participant needs and emphasize strategies to overcome barriers encountered during the direct technical assistance phase of the project.

The workshop series included three separate sessions. The first session was an overview that included all registered participants. The second and third sessions were specifically designed to address PAYT issues for municipal and exclusive contract collection programs respectively. Workshop attendees were divided between municipal collection and contract collection programs. Some solid waste management district staff members attended the second and third sessions to learn strategies for providing technical assistance to both municipal and contract collection communities.

Each of the sessions and its objectives are described below:

Session 1: PAYT Overview (August 16, 2001) = This session was intended to provide an overview of important PAYT concepts and factors contributing to the type of PAYT rate structures selected by communities. This session identified the MSW program information and cost components necessary to develop a PAYT rate structure. The group "walked through" the AISWMD Local MSW Program Information Form and discussed strategies to locate required input.

Participants were tasked with returning to their communities and completing the form. They were asked to bring their own communities' MSW program data to the next session to develop PAYT rate structure rates.

Session 2: PAYT Planning and Rate Structure Development for Municipal Collection Communities (August 29, 2001) = This session demonstrated current PAYT rate structure development methods including: EPA Worksheets, "Price-Setter," and the Indiana Modified PAYT Rate Structure Spreadsheets. The consultant demonstrated each rate-setting method using sample communities. The participants who had completed or partially-completed AISWMD Local

MSW Program Information Form were able to input community data and develop ratestructure samples.

The session included representatives from communities with PAYT programs. This question and answer component enabled participants to explore specific issues with individuals who had already established PAYT program.

The afternoon portions of the session addressed PAYT implementation issues. The session identified "barriers" and challenges to PAYT planning efforts. This session documented the realities and dispelled "myths" associated with the barriers. Promotional and educational materials used by other communities were shared with participants.

Session 3: PAYT Planning and Rate Structure Development for Exclusive Contract Collection Communities (August 30, 2001) = This session covered the same topics addressed in Session 2, however the consultant approached these topics from an exclusive contract collection setting.

The contract collection program included additional subject areas relating to contracting for PAYT service. The consultant discussed how communities can develop specifications that require bidders to isolate collection and disposal costs. The consultant demonstrated how figures are used as input for rate-structure development. The consultant discussed how MSW contract specifications can be written in such a way that effectively leaves rate-structure development to prospective MSW contract bidders.

The consultant discussed how communities build a "partnership" or "working relationship" with MSW contractors. This session was enhanced by the participation of a municipal contract representative from Rumpke Disposal's Cincinnati, OH regional office. This individual underscored the importance of developing a PAYT program that minimized "risks" for the contractor. The representative believed MSW companies would support PAYT contracts if three conditions could be met:

- (1) Opportunities for cost-avoidance were minimized;
- (2) Municipalities would assume responsibility for non-payment of service; and,
- (3) Municipalities would share in PAYT program administrative costs.

The consultant provided each attendee with a Resource Pack of materials for PAYT Planning, Rate Structure Development, and Implementation.

A list of workshop attendees is provided immediately following this page.

Lessons Learned from PAYT Workshop Activities

The popularity of the PAYT Planning and Rate Structure Workshop Series demonstrates local and solid waste management district desire to investigate PAYT financing for MSW programs. The "task oriented" approach of the workshop challenged participants to seek out MSW program information, consider PAYT options, evaluate relative advantages of PAYT rate structures, and assess implementation issues. Demonstrating manual and computer-based rate structure development methods allowed participants to see just how easily PAYT rate structures could be developed and

analyzed. Though provided in an abbreviated format, the workshops guided participants through the actual PAYT planning process.

The workshop materials and subsequent discussions introduced elected officials, MSW program managers, and solid waste district personnel to the overall PAYT planning process. The consultant believes that these workshops provided participants with a foundation upon which they may build PAYT programs that are appropriate to their individual communities.

Efforts to expand PAYT programs may replicate the workshop outline and materials from time to time to meet the ever increasing local demand for more PAYT planning assistance.

"Pay-As-You-Throw" Technical Assistance Project Final Report Section 6: Indiana Pay-As-You-Throw Tool-Kit

Background

The PAYT Technical Assistance Project included development of a resource that would provide communities with PAYT planning assistance after the completion of the project. This resource is the "Pay-As-You-Throw" Tool-Kit. This resource is modeled after the US EPA's "Pay-As-You-Throw" Tool-Kit. The Indiana Tool-Kit was designed not to duplicate, but to supplement the US EPA Tool-Kit. To this end, the Indiana "Pay-As-You-Throw" Tool Kit was specifically designed to address challenges to planning and implement PAYT programs in the legal, political, and environmental context of Indiana.

The Indiana Tool Kit was prepared to help communities anticipate challenges in PAYT planning and implementation. The Indiana PAYT Tool Kit reflects the insights and observations gathered by PAYT Technical Assistance Project participants throughout the grant period, especially during the direct technical assistance phase of the project. The Indiana "Pay-As-You-Throw" Tool Kit emphasizes three important areas:

- (1) Economics of municipal solid waste programs and how this relates to PAYT financing;
- (2) Identifying MSW program costs and program information; and,
- (3) Factors influencing the selection of a PAYT program option.

The Indiana "Pay-As-You-Throw" Tool-Kit reflects the local preference for "modified" (or multi-component) PAYT rate structures found in Indiana. This is a regional trend evident throughout the Midwest. The variety of modified PAYT programs found in Indiana underscores the contention that there is no "cookie-cutter approach" to developing a PAYT program. The Tool Kit recognizes this by paying great attention to the factors that contribute to selecting the "most appropriate" PAYT program for one community. Creating planning tools to help communities develop modified PAYT financing is an important contribution of the Indiana "Pay-As-You-Throw" Tool Kit. Highlighting approaches to develop modified PAYT programs reflects a marked departure from existing PAYT planning resources, which reflect national trends toward unit-based pricing programs.

Indiana "Pay-As-You-Throw" Tool-Kit Contents

The 53 page PAYT resource is organized into the following sections:

- Introduction to "Pay-As-You-Throw" Financing;
- MSW Economics and Financing;
- Gathering Local MSW Data Necessary for EPA "Six Step" PAYT Planning Process;
- PAYT Rate Structure Considerations;
- Using Existing Methods to Develop PAYT Rates;
- Indiana Modified PAYT Rate Spreadsheets;
- Implementing PAYT and Addressing Barriers; and,
- Conclusions and Implications for Future PAYT Efforts.

The Indiana "Pay-As-You-Throw" Tool Kit includes informational resources developed over the course of the PAYT Technical Assistance Project. These supplementary resource materials are identified as follows:

- A list of Indiana communities with PAYT financing for MSW and Indiana PAYT Case Studies;
- Model Timeline for PAYT Planning and Implementation;
- AISWMD Local MSW Program and Cost Information Form;
- PAYT Rate Structure Appropriateness Matrix to assist communities evaluate PAYT program options; and,
- Indiana Modified PAYT Rate Structure Development Spreadsheets.

Indiana Modified PAYT Rate Structure Spreadsheets

The consultant believes the most significant contribution of the Indiana "Pay-As-You-Throw" Tool Kit is the Indiana Modified PAYT Rate Structure Development Spreadsheets. These spreadsheets were developed using Lotus 1-2-3, Release 4.0 software.

These spreadsheets were not included in the original program scope of services. However, the consultant recognized the need for a computer-based method to develop modified PAYT rates. The consultant and IDEM-OPPTA agreed that communities interested in modified PAYT programs were not able to utilize previously-developed rate structure development tools.

This rate structure development method is actually eight separate worksheets. The worksheets are identified as follows:

- Part A = MSW Program Volume and Community Characteristics;
- Part B = MSW Program Costs;
- Part C = MSW Program Revenue Sources;
- Part D = MSW Program "Cost of Service Rates" for Base Year;
- Part E = Option A: Rate Structure Options and Revenue for Unit-Based Pricing Program Types;
- Part E = Option B: Rate Structure Options and Revenue for Fixed Cost & Variable Cost Pricing PAYT options;
- Part E = Option C: Rate Structure Options and Revenue for Two-Can Limit Modified PAYT Pricing options; and,
- Part E= Option D: Rate Structure Options and Revenue for Three-Can Limit Modified PAYT Pricing options.

The strength of the Indiana Modified PAYT Rate Structure Development Spreadsheets is that they were developed to meet the rate structure development and evaluation preferences of Indiana communities. The Indiana communities participating in the direct technical assistance phase of the project wanted to consider numerous PAYT rate structure types, as well as alternative rate schedules within each type. The communities were also interested in quickly evaluating the rate streams and conducting multiple rate setting sessions. The Indiana Modified PAYT Rate Structure Development Spreadsheets enables communities to accomplish these objectives in an efficient and timely manner.

Once a community has entered its MSW program, community, volume, and cost information into the various worksheets, the community can develop multiple rate structures, calculate revenue streams, and analyze revenue stream adequacy in real time. By changing the rate structure fee schedule, a community can easily conduct multiple rounds of rate-setting exercises.

Lasting Contributions of the Indiana "Pay-As-You-Throw" Tool Kit

The Indiana "Pay-As-You-Throw" Tool Kit is a significant contribution to the body of literature designed to assist communities in implementing PAYT financing for MSW programs. The Indiana "Pay-As-You-Throw" Tool Kit thoroughly documents the PAYT planning process utilized during the direct technical assistance component of the project. This Tool Kit will enable any community to follow the same PAYT planning and rate-structure development process utilized during the direct technical assistance phase of the project. This Tool Kit can be used now and in the future to guide communities through the PAYT planning process.

The Indiana "Pay-As-You-Throw" Tool Kit serves to clarify misconceptions regarding the potential impact of PAYT financing to reduce overall MSW program costs. During the course of the project, the consultant observed that elected officials and MSW program managers expected PAYT to reduce overall MSW costs in proportion to their reduction in trash volume. The consultant included a great deal of background information on MSW program financing, specifically the difference between fixed and variable costs. This economic discussion may be unnecessary for most individuals who will use the Tool Kit.

The consultant feels one cannot overstate the differences between fixed and variable costs and how these differences influence the selection of rate structure type. The Tool Kit includes an extensive discussion of MSW economics to demonstrate that PAYT directly reduces disposal costs but has less direct impact on overall MSW program costs. The consultant remains convinced that successful and sustainable PAYT programs utilize rate structures designed to recover fixed and variable costs through appropriate financing mechanisms.

The Indiana "Pay-As-You-Throw" Tool Kit will be distributed by the IDEM-OPPTA Recycling Branch to communities interested in considering the economic feasibility of PAYT financing for local MSW programs.

Lessons Learned from the Indiana "Pay-As-You-Throw" Tool Kit

The Indiana "Pay-As-You-Throw" Tool Kit was developed in response to the informational and technical assistance needs of the communities participating in the direct technical assistance phase of the project and the PAYT planning workshops. As such, the Tool Kit document explains the advantages of PAYT financing as part of a comprehensive residential MSW program.

The consultant believes the Tool Kit can be used by many communities for years to come to guide PAYT planning efforts. The consultant believes the Tool Kit can be promoted through periodic workshops to actively promote PAYT planning efforts.

"Pay-As-You-Throw" Technical Assistance Project Final Report Section 7: Lessons Learned from the Indiana PAYT Technical Assistance Project

The IDEM-AISWMD "Pay-As-You-Throw" (PAYT) Technical Assistance Project represents the most comprehensive research on the State of Indiana's local PAYT municipal solid waste (MSW) programs. This project identified three major trends for Indiana PAYT programs. These are:

- Great variety of local PAYT program options;
- Great variety within modified PAYT programs; and,
- Economic motivation for PAYT financing.

Each of these trends is discussed below.

Great Variety in Indiana "Pay-As-You-Throw" Programs

The term that best reflects the state's PAYT programs is "variety." The MSW literature often notes that there is no "cookie-cutter" approach to PAYT financing. Indiana's PAYT programs underscore this point. Indiana PAYT programs demonstrate the variety of options available to communities, with the exceptions of variable-can sized and weight-based programs.

The only consensus preference among Indiana programs is that rural drop-off programs utilize unit-based financing. This is understandable as these programs incur largely variable costs relating to MSW disposal and transportation. Most of these programs are operated by regional solid waste management districts that offer PAYT as either an affordable alternative to private subscription service or as *the only available household disposal option* in some markets.

Diversity of Modified Programs

Most Indiana cities and towns utilize modified PAYT financing. Beyond the Duke University research that reports that "modified PAYT programs are the trend in Midwestern states," the Indiana PAYT programs reflect that there is a great variety even within this PAYT rate structure type. **What is this?**

The Indiana modified PAYT programs offer a multitude of program options for volume-based rate structure components as well as overall MSW program financing. Local MSW programs have a variety of can limits, variety of container size, and a variety of program costs recovered through the rate structure. Many MSW programs have combination financing of MSW program costs instead of self-supporting PAYT programs.

Economic Motivation for Indiana PAYT

As noted, many Indiana modified PAYT programs include varying levels of General Fund support. This trend seems to support the contention that the motivation for Indiana PAYT programs is primarily economic. The fact that Indiana municipalities are limited to a 5% annual increase in the property tax levy contributes to local PAYT introduction. Many communities have established PAYT programs as a means of financing—even if only incrementally—increasing MSW program costs.

The economic—rather than waste reduction or equity—motivation for Indiana PAYT financing is supported anecdotally by the finding that many PAYT programs are not tracking recycling diversion or avoided disposal costs. These outcomes are of secondary importance—at least among most programs—to the direct financial benefit of volume-based user fees.

Trends Influence PAYT Program Feasibility Assessment

These trends impacted the provision of technical assistance over the course of the IDEM-AISWMD project. Only one community participating in the project had selected a PAYT program preference *prior* to considering the economic feasibility of PAYT financing. And this organization was interested in a rural drop-off PAYT program.

Due to the fact that most communities view PAYT rates for MSW service as a purely economic issue, local elected officials and MSW program managers placed financing considerations before PAYT program type and PAYT program options. Based on their financial motivation for considering PAYT, communities focused attention on the revenue-side of PAYT planning activities.

Municipal interest in PAYT as a funding source resulted in the desire to consider a variety of rate structure types *and rates* before making a policy commitment to PAYT financing. The rate structure development and revenue stream evaluation activities were key to securing elected official and MSW program manager "buy in" for PAYT financing.

Municipal Interest in Options Led to Modified PAYT Computer-Based Spreadsheets

Most Indiana communities wanted to conduct multiple rounds of PAYT rate structure development to investigate the funding potential of this revenue source. Most of the available PAYT rate structure development tools addressed unit-pricing. This was problematic since few Indiana communities were interested solely in unit-pricing.

Due to municipal interest in considering a variety of rate structure types and rates, the consultant developed numerous computer-based spreadsheets to expedite rate structure develop and revenue analysis. To more efficiently meet the needs of municipalities, the consultant developed the "Indiana Modified PAYT Spreadsheets."

These Lotus 1-2-3® computer software-based spreadsheets are available for use by municipalities and solid waste management districts to facilitate the consideration of multiple rate structure types and PAYT fees.

<u>Implications for Future PAYT Financing Efforts</u>

The IDEM-OPPTA and regional solid waste management districts have worked to promote PAYT financing in Indiana. The state of Indiana has approximately 50 PAYT financing programs. There are approximately 20 more communities actively considering the feasibility of PAYT financing for local MSW programs.

During the course of the IDEM-AISWMD PAYT Technical Assistance project, two issues contributed to a municipality's willingness to pursue PAYT financing. The critical decision considerations that emerged as most influential in local PAYT financing adoption are identified as:

- (1) Ability of the General Fund to absorb increasing MSW program costs, and,
- (2) Structural barriers—in the form of MSW Contract Agreements—for communities with exclusive contracts for residential MSW service.

Waiting for Economic Conditions to Change

The first critical decision consideration is understandable bearing in mind that most communities view PAYT financing as a funding source, *not a means for improving waste reduction or increasing MSW financing equity*. Unfortunately, for those who advocate for PAYT on the basis waste reduction or fairness, the decision to adopt PAYT financing is largely economic. Until such time that disposal costs rise to a level where the General Fund can no longer absorb them, most Indiana communities will not adopt PAYT rates.

It is not clear how the "Property Tax Reform" movement within Indiana will impact efforts to expand PAYT financing. In some communities, pressure on the General Fund from other essential services may "crowd out" MSW program costs. Communities with municipal collection programs may seek to reduce MSW program costs through privatization and user fees. However, other communities may be resistant to introducing volume-based user fees for MSW service out of concern that the public will not accept an additional—and separate—expense.

Some communities rejected implementing PAYT financing because the "financial benefits" did not justify the perceived "political risks." Some communities decided to suspend PAYT efforts until the economic situation necessitated it.

With respect to the local interest to utilize PAYT rates in response to economic issues, "watchful waiting" may be the best approach for those who would promote PAYT financing for residential MSW service. The combination of increased disposal (and transportation costs) and increasing pressures on the General Fund will certainly find more Indiana communities investigating PAYT programs.

A Different Approach to Contracting for MSW Service

Several communities who were very interested in PAYT financing suspended efforts upon learning that their existing MSW contract agreements with private collection companies offered no economic reward for introducing PAYT financing. The vast majority of MSW contract agreements include "locked-in" prices for unlimited collection and disposal of trash.

Inasmuch as there are "political costs" associated with PAYT financing, it is unlikely that any community will introduce an economic incentive for households to reduce waste when the municipality cannot enjoy a similar incentive. This is completely understandable when one considers that Indiana introduction of PAYT is usually linked to the financial impact of doing so. The structural barrier posed by these contract provisions needs to be addressed before one can expect to expand PAYT financing in contract collection settings.

As opposed to the "watchful waiting" prescribed by the first implication, those who would promote PAYT may take a more active approach addressing this condition. The IDEM-AISWMD PAYT Technical Assistance project found that most communities were interested in incorporating PAYT contract alternatives in their specifications for MSW service.

"Best Management Practices" for MSW Contracting

Efforts to expand PAYT financing in contract collection settings should promote the following initiatives:

- Contract for household collection and disposal of residential trash using separate billing mechanisms. Collection based on number of households (fixed costs) and disposal based on volume collected (variable costs);
- Inclusion of various PAYT options in municipal specifications for MSW service. The bid prices, effectively, become the PAYT rate structure; and,
- Provisions to enable communities to implement PAYT *during* a contract, not just at the start of the contract period.

Indiana communities have successfully used these strategies to expand PAYT into contract collection communities in recent years. Of course MSW collection contractor willingness to participate in PAYT programs remains an issue. Efforts to build contractor interest in PAYT contract programs should focus on reassuring companies that the perceived "risks" associated with PAYT can be minimized.

The City of Elkhart's experience with a contractor not enforcing a can limit demonstrates an important concept in PAYT rate structure design. Non-enforcement can have significant negative impact on the effectiveness of a PAYT contract program. Contract PAYT programs need to include economic incentives *to the collection company* to ensure that it is in the contractor's interest to enforce the can limit. A strategy to address this is to have the sale of excess trash stickers as a direct transaction between the collection company and the household. In this setting a collection company may still fail to enforce the can limit; however the collection company, not the municipality, will bear the lost revenue.

Indiana "Pay-AS-You-Throw" Tool-Kit as a Lasting Resource

The theme of the IDEM-AISWMD PAYT Technical Assistance project was to build local capacity for the planning activities necessary for evaluating PAYT financing. A project deliverable that will serve this function even after the grant-funded project concludes is the Indiana "Pay-As-You-Throw" Tool-Kit. This resource can guide communities through the PAYT planning, rate structure development, and revenue analysis activities.

The extensive discussion of MSW economics and financing provides a concise discussion of PAYT financing's ability to reduce variable MSW costs. This component of the Tool Kit will ensure that communities exploring PAYT financing will have realistic expectations of how volume-based rates can reduce MSW costs.

The Indiana database of PAYT programs and Case Studies provide insights into the breadth of PAYT service options available for communities. These resources will facilitate PAYT program modeling to assist communities in selecting the "most appropriate" PAYT program option.

The Indiana Modified PAYT Rates Spreadsheets are an important component of this resource. The computer-based spreadsheets will enable communities to:

- Consider multiple PAYT rate structure types;
- Analyze multiple rate structure fee scales within types;
- Evaluate resulting revenue streams; and,

• Facilitate conducting multiple rounds of rate structure development, analysis, and evaluation.

Any community can use the spreadsheets at any time to expedite PAYT rate structure development and revenue stream analysis.

Conclusion

The number and varieties of PAYT programs found in the state of Indiana support the contention that PAYT can be adapted to any community regardless of size, collection arrangement, existing financing, MSW program services, and local customs and preferences. The economic conditions that favor the introduction of PAYT financing are expected to continue to encourage municipalities to consider and adopt volume-based user fees as an effective and efficient funding source.

The Indiana "Pay-As-You-Throw" Tool Kit and other informational resources developed through the PAYT Technical Assistance Project represent a significant contribution to the body of literature designed to assist communities implement PAYT financing for local MSW programs. These resources provide a wealth of PAYT planning assistance that mirror the activities utilized during the direct technical assistance phase of the project.

The activities undertaken during the Indiana PAYT Technical Assistance Project have advanced PAYT planning activities across the state of Indiana. The project deliverables will continue to benefit Indiana communities for years to come.

"Pay-As-You-Throw" Technical Assistance Project Final Report Section 7: Lessons Learned from the Indiana PAYT Technical Assistance Project

The IDEM-AISWMD "Pay-As-You-Throw" (PAYT) Technical Assistance Project represents the most comprehensive research on the State of Indiana's local PAYT municipal solid waste (MSW) programs. This project documented existing Indiana PAYT programs and developed ten case studies. Direct technical assistance activities helped 11 Indiana communities partially or fully complete the EPA "Six Step" PAYT Planning Process. The Indiana PAYT Tool Kit provides extensive instruction on PAYT planning to enable communities to independently assess the feasibility of PAYT financing.

This project identified three major trends for Indiana PAYT programs. These are:

- · Great variety of local PAYT program options;
- · Great variety within modified PAYT programs; and,
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Any community can use the spreadsheets at anytime to expedite PAYT rate structure development and revenue stream analysis.

Conclusion

PAYT financing for residential MSW programs has existed in Indiana for over ten years. PAYT financing for residential MSW programs has established a foothold in Indiana and is an institutionalized MSW management practice. The number and varieties of PAYT programs found in the state of Indiana support the contention that PAYT can be adapted to any community regardless of size, collection arrangement, existing financing, MSW program services, and local customs and preferences.

As is the case with implementing any innovative municipal program—curbside recycling, as an example—PAYT financing has already been implemented in communities where it was "easiest" to implement. For reasons based in reality or myth, most Indiana communities have not implemented PAYT financing. With the exception of communities with structural barriers, it is impossible to determine whether decision-makers believe PAYT is not economically feasible or not politically viable.

The barriers that explained the difficulties in implementing PAYT during the Indiana PAYT Technical Assistance Project are not insurmountable. PAYT financing has a strong foothold in Indiana. The project has documented the successful and sustainable performance of these communities.

The Indiana "Pay-As-You-Throw" Tool Kit and other informational resources developed through the PAYT Technical Assistance Project represent a significant contribution to the body of literature designed to assist communities implement PAYT financing for local MSW programs. These resources provide a wealth of PAYT planning assistance that mirror the activities utilized during the direct technical assistance phase of the project. The activities undertaken during the Indiana PAYT Technical Assistance Project have advanced PAYT planning activities throughout the state of Indiana. The project deliverables will continue to benefit Indiana communities for years to come.

The challenge facing advocates of PAYT financing is to develop strategies designed to address barriers—both real and imagined. These strategies must reflect the fact that the conditions that support introduction of PAYT are constantly changing. These strategies must also reflect that future PAYT financing efforts may be more protracted than earlier PAYT implementation experiences. Those who support expanding residential PAYT programs must retain the infrastructure and capabilities to work with communities as economic, structural and political conditions change.